

U.S. Application No. 10/524,300
 Filing Date August 29, 2005
 First Inventor Jingwu Z. Zhang
 Art Unit 1644
 Examiner DIBRINO, MARIANNE NMN
 Docket Number 050989.0201 01USPC

Information Disclosure Statement

NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No#
	C1 CORREAL, J. et al. Isolation and characterization of autoreactive protolipid protein specific T-cell clones from multiple sclerosis patients. <i>Neurology</i> 1995; 45:1370-8
	C2 WARREN, KG et al. Anti-myelin basic protein and anti-protolipid protein specific forms of multiple sclerosis. <i>Ann Neurol</i> 1984; 35:280-9
	C3 OLSSON, T et al. Autoreactive T lymphocytes in multiple sclerosis determined by antigen-induced secretion of interferon-gamma. <i>J Clin Invest</i> 1990; 86:981-5
/M.D./	C99 JESSEE, D., "Notice of Grant Award," for National Institutes of Health Grant No. 1 R01 NS38213-01A1. Awarded to Dr. Leslie P. Weiner on 07/30/1999. Obtained pursuant to Freedom of Information Act.
	C99A WEINER, L., Grant Application entitled, "T Cell Vaccine--A Clinical Trial for Progressive MS." National Institutes of Health Grant No. 1 R01 NS38213-01A1. Awarded on 07/30/1999. Obtained pursuant to Freedom of Information Act.
	C100 JESSEE, D., "Notice of Grant Award," for National Institutes of Health Grant No. 5 R01 NS38213-02. Awarded to Dr. Leslie P. Weiner on 07/24/2000. Obtained pursuant to Freedom of Information Act.
	C100A WEINER, L., Grant Application entitled, "T Cell Vaccine--A Clinical Trial for Progressive MS." National Institutes of Health Grant No. 5 R01 NS38213-02. Awarded on 07/24/2000. Obtained pursuant to Freedom of Information Act.
	C101 JESSEE, D., "Notice of Grant Award," for National Institutes of Health Grant No. 5 R01 NS38213-03. Awarded to Dr. Leslie P. Weiner on 08/05/2001. Obtained pursuant to Freedom of Information Act.
	C101A WEINER, L., Grant Application entitled, "T Cell Vaccine--A Clinical Trial for Progressive MS." National Institutes of Health Grant No. 5 R01 NS38213-03. Awarded on 08/05/2001. Obtained pursuant to Freedom of Information Act.
	C102 BOND, K.P., "Notice of Grant Award," for National Institutes of Health Grant No. 5 R01 NS38213-04. Awarded to Dr. Leslie P. Weiner on 08/08/2002. Obtained pursuant to Freedom of Information Act.
	C102A WEINER, L., Grant application entitled, "T Cell Vaccine--A Clinical Trial for Progressive MS." National Institutes of Health Grant No. 5 R01 NS38213-04. Awarded on 08/08/2002. Obtained pursuant to Freedom of Information Act.
	C103 BOND, K.P., "Notice of Grant Award," for National Institutes of Health Grant No. 5 R01 NS38213-05. Awarded to Dr. Leslie P. Weiner on 09/17/2003. Obtained pursuant to Freedom of Information Act.
	C103A WEINER, L., Grant application entitled, "T Cell Vaccine--A Clinical Trial for Progressive MS." National Institutes of Health Grant No. 5 R01 NS38213-05. Awarded on 09/17/2003. Obtained pursuant to Freedom of Information Act.
	C104 BOND, K.P., "Notice of Grant Award," for National Institutes of Health Grant No. 5 R01 NS38213-06. Awarded to Dr. Leslie P. Weiner on 07/23/2004. Obtained pursuant to Freedom of Information Act.
	C104A WEINER, L., Grant application entitled, "T Cell Vaccine--A Clinical Trial for Progressive MS." National Institutes of Health Grant No. 5 R01 NS38213-06. Awarded on 07/23/2004. Obtained pursuant to Freedom of Information Act.
	C105 BOND, K.P., "Notice of Grant Award," for National Institutes of Health Grant No. 5 R01 NS38213-07. Awarded to Dr. Leslie P. Weiner on 08/03/2005. Obtained pursuant to Freedom of Information Act.
	C105A WEINER, L., Grant application entitled, "T Cell Vaccine--A Clinical Trial for Progressive MS." National Institutes of Health Grant No. 5 R01 NS38213-07. Awarded on 08/03/2005. Obtained pursuant to Freedom of Information Act.
	C38 ZANG, CQ. Preferential recognition of TCR hypervariable regions by human anti-idiotype T cells introduced by T cell vaccination. <i>Journal of Immunology</i> 164:4011-7 (2000)
	C73 HOHFIELD, R. The ups and downs of multiple sclerosis therapeutics. <i>Annals of Neurology</i> 49(3): 281-84 (2001)
/M.D./	C74 JOSHI, N. The T-cell response to myelin basic protein in familial multiple sclerosis: diversity of line specificity, restricting elements, and T-cell receptor usage. <i>Annals of Neurology</i> 34:385-93 (1993)

		NON PATENT LITERATURE DOCUMENTS
Examiner Initials	Cite No #	Authors, Title, Journal, Date, Year, Pages, Volume
/M.D./	C75	TOURNIER-LASSERVE, E. Human T-cell response to myelin basic protein in multiple sclerosis patients and healthy subjects. <i>Journal of Neuroscience Research</i> 19:149-56 (1988)
	C76	PETTE, M. Myelin basic protein-specific T lymphocyte lines from MS patients and healthy individuals. <i>Neurology</i> 40:1770-6 (1990)
	C77	LIBLAU, R. T cell response to myelin basic protein epitopes in multiple sclerosis patients and healthy subjects. <i>Eur J Immunol</i> 21:1391-5 (1991)
	C78	SHANMUGAM, A. In vivo clonal expansion of T lymphocytes specific for an immunodominant N-terminal myelin basic protein epitope in healthy individuals. <i>Journal of Neuroimmunology</i> 59:165-72 (1995)
	C79	HELLINGS, N. T-cell reactivity to multiple myelin antigens in multiple sclerosis patients and healthy controls. <i>Journal of Neuroscience Research</i> 63: 290-302 (2001)
	C80	MARTIN, R. Diversity in fine specificity and T cell receptor usage of the human CD4+ cytotoxic T cell response specific for the immunodominant myelin basic protein peptide 87-106. <i>Journal of Immunology</i> 148:1359-66 (1992)
	C81	PETTE, M. Myelin autoreactivity in multiple sclerosis: recognition of myelin basic protein in the context of HLA-DRA2 products by T lymphocytes of multiple sclerosis patients and healthy donors. <i>Proc Natl Acad Sci USA</i> 87:7968-72 (1990)
	C82	BLEVINS, G. Future immunotherapies in multiple sclerosis. <i>Semin Neurol</i> 23(2):147-58 (2003)
	C83	FELDMAN, M. Design of effective immunotherapy for human autoimmunity. <i>Nature</i> 435:612-9 (2005)
	C84	HONG, J. Ex vivo detection of myelin basic protein-reactive T cells in multiple sclerosis and controls using specific TCR oligonucleotide probes. <i>Eur J Immunol</i> 34:870-81 (2004)
	C85	MARTIN, R. Fine specificity and HLA restriction of myelin basic protein-specific cytotoxic T cell lines from multiple sclerosis patients and healthy individuals. <i>Journal of Immunology</i> 145:540-8 (1990)
	C86	HELLINGS, N. Longitudinal study of antimyelin T cell reactivity in relapsing remitting multiple sclerosis association with clinical and MRI activity. <i>J Neuroimmunol</i> 126(1-2):143-60 (2002)
	C87	SOSPREDA, M. Immunology of multiple sclerosis. <i>Annu Rev Immunol</i> 23:683-747 (2005)
	C88	MARTIN, R. Immunotherapy of multiple sclerosis: where are we? where should we go?. <i>Nature Immunology</i> 2(9):785-8 (2001)
	C89	MURARRO, PA. Molecular tracking of antigen-specific T cell clones in neurological immune-mediated disorders. <i>Brain</i> 126:20-31 (2003)
	C90	PENDER, MP. A study of human T cell lines generated from multiple sclerosis patients and controls by stimulation with peptides of myelin basic protein. <i>Journal of Neuroimmunology</i> 70(1):65-74 (1996)
	C91	LUTTON, JD. Multiple sclerosis: etiological mechanisms and future directions. <i>Exp Biol Med</i> 229:12-20 (2004)
	C92	DORNMAIR, K. T-cell mediated autoimmunity. <i>Am J Pathol</i> 163(4):1215-26 (2003)
	C93	SODERSTORM, M. T cells recognizing multiple peptides of myelin basic protein are found in blood and enriched in cerebrospinal fluid in optic neuritis and multiple sclerosis. <i>Scand J Immunol</i> 37:555-68 (1993)
	C94	KAPPOS, L. Induction of a non-encephalitogenic type 2 T helper-cell autoimmune response in multiple sclerosis after administration of an altered peptide ligand in a placebo-controlled, randomized phase II trial. <i>Nature Medicine</i> 6(9): 1176-82 (2002)
	C95	WIENDL, H. Therapeutic approaches in multiple sclerosis. <i>BioDrugs</i> 16(3): 183-200 (2002)
	C96	BIELEKOVA, B. Encephalitogenic potential of the myelin basic protein peptide (amino acids 83-99) in multiple sclerosis: results of a phase II clinical trial with an altered peptide ligand. <i>Nature Medicine</i> 5(10): 1167-75 (2000)
↓	C97	WUCHERPENNIG, KW. Recognition of the immunodominant myelin basic protein peptide by autoantibodies and HLA-DR2-restricted T cell clones from multiple sclerosis patients. <i>J Clin Invest</i> 100(5): 1114-22 (1997)
/M.D./	C98	MEINL, E. Myelin basic protein-specific T lymphocyte repertoire in multiple sclerosis. <i>J Clin Invest</i> 92: 2633-43 (1993)
	C36	ZHANG, J et al. T-cell vaccination in autoimmune diseases. <i>Human Immunology</i> 38:87-96 (1993)
	C57	ACHIRON, A. T-cell vaccination in multiple sclerosis. <i>Autoimmune Reviews</i> 3:25-32 (2004)
	C58	ACHIRON, A. et al. T cell vaccination in multiple sclerosis relapsing-remitting nonresponders patients. <i>Clinical Immunology</i> 110:455-60 (2004)
	C59	BEN-NUN, A. The autoimmune reactivity to myelin oligodendrocyte glycoprotein (MOG) in multiple sclerosis is potentially pathogenic effect of copolymer 1 on MOG-induced diseases. <i>Journal Neurol</i> 243(1) S14-S22 (1996)
	C60	BEN-NUN, A. The rapid isolation of clonal antigen-specific T lymphocyte lines capable of mediating autoimmune encephalomyelitis. <i>Eur Journal Immunol</i> 11:195-99 (1981)

		NON PATENT LITERATURE DOCUMENTS
Examiner Initials	Cite No #	Authors, Title, Journal, Date, Year, Pages, Volume
	C61	BEN-NUN, A. Vaccination against autoimmune encephalomyelitis with T lymphocyte line cells reactive against myelin basic protein. <i>Nature</i> 292(5919):60-61 (1981)
	C62	HELLINGS, N. et al. T cell vaccination in multiple sclerosis: update on clinical application and mode of action. <i>Autoimmunity Reviews</i> 3:267-75 (2004)
/M.D./	C63	HERMANS, G. et al. Cellular and humoral immune responses against autoreactive T cells in multiple sclerosis patients after T cell vaccination. <i>Journal of Autoimmunity</i> 13:233-46 (1999)
	C64	HERMANS, G. et al. Myelin reactive T cells after T cell vaccination in multiple sclerosis: cytokine profile and depletion by additional immunizations. <i>Journal of Neuroimmunology</i> 102:79-84 (2000)
	C65	STINNISSEN, P. et al. gamma-delta T cell responses to activated T cells in multiple sclerosis patients induced by T cell vaccination. <i>Journal of Neuroimmunology</i> 87:94-104 (1998)
	C66	WARREN, K.G. et al. Purification of primary antibodies of the myelin basic protein antibody cascade from multiple sclerosis patients: immunoreactivity studies with homologous and heterologous antigens. <i>Clin Invest Med</i> 15(1): 18-29 (1992)
	C67	ZHANG, J. Multiple sclerosis: perspectives on autoimmune pathology and prospects for therapy. <i>Current Neurology</i> 15:15-55 (1995)
	C68	ZHANG, J. et al. In vivo clonotypic regulation of human myelin basic protein-reactive T cells by T cell vaccination. <i>Journal of Immunology</i> 155:5868-77 (1995)
/M.D./	C69	ZHANG, J. et al. Myelin basic protein-reactive T cells in multiple sclerosis: pathologic relevance and therapeutic targeting. <i>Cytotechnology</i> 16:181-87 (1994)
	C70	ZHANG, J. et al. T cell vaccination in multiple sclerosis: hopes and facts. 94:112-15 (1994)
	C71	ZIPP, F. et al. Aktuelle Therapie der Multiplen Sklerose: T-Zellvaccination. <i>Neuroarzt</i> Vol. 65, pp. 424-425 (1998)
/M.D./	C72	ZIPP, F. et al. Diversity of the anti-T-cell receptor immune response and its implications for T-cell vaccination therapy of multiple sclerosis. <i>Brain</i> 121:1395-1407 (1998)
	C12	JOHNSON et al. Copolymer 1 reduces relapse rate and improves disability in relapsing-remitting multiple sclerosis. <i>Neurol</i> 45:1268-76 (1995)
	C19	NAPABUSTEK et al. T-lymphocyte lines producing or vaccinating against autoimmune encephalomyelitis (EAE): functional activation induces peanut agglutinin receptors and accumulation in the brain and thymus of T-line cells. <i>Eur J Immunol</i> 13:418-23
	C49	ZHANG, J. et al. Vaccination with Myelin-Reactive T cells: Results of a Clinical Trial in Patients with Multiple Sclerosis. <i>Neurology</i> , 2001;54(7), Supp. 3-A23.
	C51	ZHANG, J. et al. T cell vaccination in multiple sclerosis. <i>Multiple sclerosis</i> 1(6): 353-56 (1996)
	C52	ZANG, YCO, et al. Th2 immune regulation induced by T cell vaccination in patients with multiple sclerosis. <i>Eur J Immunol</i> 60(3) 908-13 (2000)
	C53	ZHANG, J. et al. T-cell vaccination: clinical application in autoimmune diseases. <i>J Mol Med</i> 74(11): 653-62 (1996)
	C54	STINNISSEN, P. et al. Vaccination with autoreactive T-cell clones in multiple sclerosis: overview of immunological and clinical data. <i>J Neurosci Res</i> 45(4): 500-11 (1996)
	C55	Zhang, J. et al. T-cell vaccination in multiple sclerosis: Results of a preliminary study. <i>J. Neurol.</i> 2002;243(2):212-8.
	C56	HAFLER, D. et al. T-cell vaccination in multiple sclerosis: a preliminary report. <i>Clin Immunol Immunopathol</i> 82(3): 307-13 (1992)
	C1	ALLEGRETTA, M. et al. T cells responsive to myelin basic protein in patients with multiple sclerosis. <i>Science</i> 247:718-21 (1990)
	C2	BEN-NUN, A. et al. The rapid isolation of clonable antigen-specific T cell lymphocyte lines capable of mediating autoimmune encephalomyelitis. <i>Eur J Immunol</i> 11:195-204 (1981)
	C3	BEN-NUN, A. et al. Vaccination against autoimmune encephalomyelitis with T lymphocyte line cells reactive against myelin basic protein. <i>Nature</i> 292:60-61 (1981)
	C4	CHOU, YK. et al. Frequency of T cell specific for myelin basic protein and myelin proteolipid protein in blood and cerebrospinal fluid in multiple sclerosis. <i>J Neuroimmunol</i> 38:105-14 (1992)
	C5	CORREALE et al. T cell vaccination in secondary progressive multiple sclerosis. <i>J Neuroimmunol</i> 107:130-39 (2000)
	C6	EUROPEAN STUDY GROUP ON INTERFERON BETA 1-B IN SECONDARY PROGRESSIVE MS. Placebo-controlled multicentre randomized trial of interferon beta 1-b in treatment of secondary progressive multiple sclerosis. <i>Lancet</i> 352:1491-97 (1998)
/M.D./	C7	GENAIN. Antibody facilitation of multiple sclerosis-like lesions in a nonhuman primate. <i>J Clin Invest</i> 96:2966-74 (1995)

NON PATENT LITERATURE DOCUMENTS		
Examiner Initials	Cite No #	Authors, Title, Journal, Date, Year, Pages, Volume
/M.D./	C8	HAFLER et al. T cell vaccination in multiple sclerosis: a preliminary report. Clinical Immunol and Immunopathology 62:307-13 (1992)
	C9	HONG et al. A common T cell receptor V-D-J sequence in V3D1.1 T cells recognizing an immunodominant peptide og myelin basic protein in multiple sclerosis. J Immunol 163:3530-38 (1999)
	C10	HONG et al. Reactivity and regulatory properties of human anti-idiotypic antibodies induced by t cell vaccination. J Immunol 165:6858-64 (2000)
	C11	JACOBS. Intramuscular interferon beta-1a for disease progression in relapsing multiple sclerosis. Ann Neurol 39:285-94 (1996)
	C13	KERLERO DE ROSBO et al. Reactivity to myelin antigens in multiple sclerosis: peripheral blood lymphocytes respond predominantly to myelin oligodendrocyte glycoprotein. J Clin Invest 92:2602-08 (1993)
	C14	LIDER. Anti-idiotypic network induced by T cell vaccination against experimental autoimmune encephalomyelitis. Science 239:181-83 (1988)
	C15	LINDERT et al. Multiple sclerosis: B- and T-cell responses to the extracellular domain of the myelin oligodendrocyte glycoprotein. Brain 122:2089-99 (1999)
	C16	LOHSE AW. et al. Control of experimental autoimmune encephalomyelitis by T cells responding to activated T cells. Science 244:820-22 (1999)
	C17	MARKOVIC-PLESE et al. T cell recognition of immunodominant and cryptic proteolipid protein epitopes in humans. J Immunol 155:982-92 (1995)
	C18	MEDAER. Depletion of myelin basic protein-reactive T cells by T cell vaccination: a pilot clinical trial in multiple sclerosis. Lancet 346:807-808 (1995)
	C19	NAPARSTEK et al. T lymphocyte lines producing or vaccinating against autoimmune encephalomyelitis (EAE): functional activation induces peanut agglutinin receptors and accumulation in the brain and thymus of line cells. Eur J Immunol 13:418-23 (1983)
	C20	OTA et al. T cell recognition of an immunodominant MBP epitope in multiple sclerosis. Nature 346: 183-87 (1990)
	C21	OFFNER et al. Lymphocyte vaccination against experimental autoimmune encephalomyelitis: evaluation of vaccination protocols. J Neuroimmunol 21:13-22 (1989)
	C22	POSER et al. New diagnostic criteria for multiple sclerosis: guidelines for research protocols. Ann Neurol 13:227-31 (1983)
	C23	SCHELTENS et al. White matter lesions on magnetic resonance imaging in clinically diagnosed Alzheimer's disease. Brain 115:735-48 (1992)
	C24	SELMAJ et al. Identification of lymphotoxin and tumor necrosis factor in multiple sclerosis lesions. J Clin Invest 87:949-54 (1991)
	C25	SHARIEF MK. Et al. Association between tumor necrosis factor-alpha and disease progression in patients with multiple sclerosis. N Engl J Med 325:467-472 (1991)
	C26	STINNISSEN et al. Autoimmune pathogenesis of multiple sclerosis: role of autoreactive T lymphocytes and new immunotherapeutic strategies. Crit Rev Immunol 17:33-75 (1997)
	C27	THE IFNB MULTIPLE SCLEROSIS STUDY GROUP. Interferon beta-1b is effective in relapsing-remitting multiple sclerosis: I clinical results of a multicenter, randomized, double-blind, placebo-controlled trial. Neurol 43: 655-61 (1993)
	C30	TROTTER et al. T cell recognition of myelin proteolipid protein and myelin proteolipid protein peptides in the peripheral blood of multiple sclerosis and control subjects. J Neuroimmunology 84:172-78 (1998)
	C31	TROTTER et al. HPRT mutant T cell lines from multiple sclerosis patients recognize myelin proteolipid protein peptides. J Neuroimmunol 75:95-103 (1997)
	C32	TRUYEN et al. Improved correlation of magnetic resonance imaging (MRI) with clinical status in multiple sclerosis (MS) by use of extensive standardized imaging-protocol. J Neurol Sci 96:173-82 (1990)
	C33	TUOHY et al. Spontaneous regression of primary autoreactivity during chronic progression of experimental autoimmune encephalomyelitis and multiple sclerosis. J Exp Med 189:1033-42 (1999)
	C34	VANDEVYVER et al. Clonal expansion of myelin basic protein-reactive T cells in patients with multiple sclerosis: restricted T cell receptor V gene rearrangements and CDR3 sequence. Eur J Immunol 25:958-68 (1995)
V	C35	WUCHERPENNIG et al. Clonal expansion and persistence of human T cells specific for an immunodominant myelin basic protein peptide. J Immunol 152:5581-92 (1994)
/M.D./	C39	ZANG et al. Immunoregulation and blocking antibodies induced by interferon beta treatment in MS. Neurobiology 55: 397-404 (2000)

		NON PATENT LITERATURE DOCUMENTS				
Examiner Initials	Cite No#	Authors, Title, Journal, Date, Year, Pages, Volume				
/M.D./ ↓	C40	ZANG et al. Aberrant T cell migration toward RANTES and MIP-1alpha in patients with multiple sclerosis overexpression of chemokine receptor CCR5. <i>Brain</i> 123:1874-82 (2000)				
	C41	ZANG et al. Regulation of chemokine receptor CCR5 and production of RANTES and MIP-1alpha by interferon-beta. <i>J Neuroimmunol</i> 112:174-80 (2001)				
	C43	ZHANG and RAUS. T cell vaccination in autoimmune diseases from laboratory to clinic. <i>Human Immunol</i> 38:87-96 (1993)				
	C44	ZHANG et al. Increased frequency of interleukin 2-responsive T cells specific for myelin basic protein and proteolipid protein in peripheral blood and cerebrospinal fluid of patients with multiple sclerosis. <i>J Exp Med</i> 179:973-84 (1994)				
	C45	ZHANG et al. In vivo clonalotypic regulation of human myelin basic protein-reactive T cells by T cell vaccination. <i>J Immunol</i> 155:5868-77 (1995)				
/M.D./	C47	ZHANG, J. et al. Myelin basic protein-specific T lymphocytes in multiple sclerosis and controls: precursor frequency, fine specificity, and cytotoxicity. <i>Ann of Neurology</i> 32(3): 330-38 (1992)				

/Marianne DiBrino/

05/14/2009